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मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

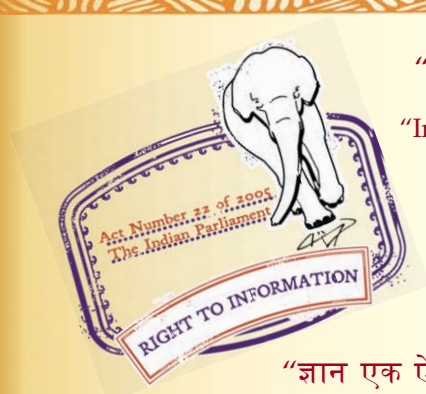
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 13808-4 (1996): Quality management for hospital services (upto 30 bedded hospitals) Guidelines, Part 4: Hospital Support services [MHD 14: Hospital Planning]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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भारतीय मानक

अस्पताल सेवाओं के लिये गुणता प्रबन्ध
(30-संसतरित अस्पताल के लिये) — मार्गदर्शी सिद्धान्त

भाग 4 अस्पताल आधार सेवाएँ

Indian Standard

QUALITY MANAGEMENT FOR
HOSPITAL SERVICES
(FOR 30-BEDDED HOSPITAL) — GUIDELINES

PART 4 HOSPITAL SUPPORT SERVICES

ICS 11.020

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

FOREWORD

This Indian Standard (Part 4) was adopted by the Bureau of Indian Standards, after the draft finalized by the Hospital and Medical Care Services Sectional Committee had been approved by the Management and Systems Division Council.

Need has been felt for establishing quality management and quality assurance procedures in hospital services so as to make the same more effective, economical and accountable. Once a health and medical care facility has been planned and equipped, there is a need to manage it scientifically so that quality service is provided to patients on a continued basis. While basic management principles and individual skills are helpful in such efforts, optimum results can be achieved only if certain standards and guidelines are available for the management and operational systems of health and medical care services. For this purpose, it is necessary, as a first step, to lay down norms and standards and then to provide the requisite infrastructure needed for achieving the desired targets.

The purpose of this standard is to provide basic guidelines for evolving a well-planned and systematic management procedure for hospital support services, the activities under which may be grouped into the following sub-units, taking the similar and allied functions together:

- a) Hospital Supply System (Hospital stores)
- b) Central Sterile and Supply Department (CSSD)
- c) Hospital Laundry and Linen services (Laundry)
- d) Hospital Dietary Services (Kitchen)
- e) Housekeeping and Maintenance Services

Hospital Supply System is an essential part of a hospital and comprises stores which are needed for its smooth functioning. Needless to say these stores need to be provided at the right cost, at the right place, at the right time, and need to be of the right quality and quantity.

With upgradation in technologies for health care delivery system, the importance of Central Sterile Supply Department (CSSD) in terms of reducing hospital infection, providing quality medical care and reducing operating cost, is well established. For a 30-bedded hospital a separate CSSD with separate staff may not be an economical proposition and hence it is suggested to have sterilization room along with Operation Theatre.

Laundry services of a hospital should be such that the basic requirements of cleanliness and disinfection should be satisfied. In addition, the requirements of safety, adequacy and timely supply of linen to various user areas at reasonable cost should also be met. Mechanical laundering is preferable for any size of hospital irrespective of the bed strength as it proves to be more methodical, time saving and cost effective. In addition, it minimizes the possibility of infection being carried to the washerman. For a small bedded hospital, a conventional laundry system is generally recommended. However, in planning for hospitals in future, adequate space should be provided for putting up a mechanized laundry.

Dietary service in a hospital serves for providing suitably appetizing and nourishing diet to the patients. It should be such that the basic requirements of hygiene, cleanliness, disinfection as well as the timely supply should be invariably met. However, provision of a kitchen for dietary service in a 30-bedded hospital may not be feasible, which, if provided, may be on contract basis. Generally the attendants of the patients are advised as to what diet to be given to the patients and the same is procured from home.

House-keeping and general maintenance of the hospital comprises the activities related to cleanliness, maintenance of hospital environment and good sanitation services for keeping the hospital premises free from pollution.

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This Part of the standard provides basic guidelines for evolving a well planned system for hospital support services in a 30-bedded hospital which would result in quality health care to the patients. Other parts of this standard are as follows:

Quality management for hospital services (for 30-bedded hospital) — Guidelines

Part 1 OPD and emergency services

Part 2 Diagnostic and blood transfusion services

Part 3 Wards, nursing services and operation theatre

Part 5 Hospital equipment management

This standard is mainly for 30-bedded general hospitals, such as, community health centres/sub-district hospitals/intermediate hospitals and covers only a part of the quality management aspect in hospital services relating to infrastructure, skills, procedures and systems, etc, which is a prescription type provision, adherence to which is expected to result in services of desired quality. The other part, comprising identification of attributes of quality and quantifying them, that is, performance type of standards for hospital services would be published in due course.

This standard has been prepared, keeping in view the minimum resources available with respect to functional requirements, such as, space; manpower; instruments and equipment; and building requirements for 30-bedded hospitals in accordance with IS 12433(Part 1):1988 'Basic requirements for hospital planning : Part 1 up to 30-bedded hospitals'.

The committee responsible for formulation of this part of the standard is given at Annex C.

Indian Standard

QUALITY MANAGEMENT FOR HOSPITAL SERVICES (FOR 30-BEDDED HOSPITAL) — GUIDELINES

PART 4 HOSPITAL SUPPORT SERVICES

1 SCOPE

This standard lays down guidelines for quality management system for hospital support services offered in a 30-bedded general hospital with reference to:

- a) Hospital supply system (Stores)
- b) Central sterile and supply department (CSSD)
- c) Hospital laundry and linen services (laundry)
- d) Hospital dietary services (kitchen)
- e) Housekeeping and maintenance services

2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard:

<i>IS No.</i>	<i>Title</i>
12433 (Part 1) : 1988	Basic requirements for hospital planning: Part 1 Up to 30-bedded hospitals
13808 (Part 5) : 1996	Quality management for hospital services (for 30-bedded hospital) — Guidelines: Part 5 Hospital equipment management

3 TERMINOLOGY

3.1 ABC Analysis

The technique used to classify items into three classes A, B and C based on annual usage value. Class A covers about 10 percent of the items with highest annual usage value which in aggregate generally account for over 70 percent of the total annual usage value of all items. Class C covers about 70 percent of the items which account for up to 10 percent of the total annual usage value. The remaining about 20 percent items are classified as Class B.

3.2 Autoclave

Equipment, of various dimensions, used for sterilization. It operates at high temperature and a sustained high pressure.

3.3 Central Sterile Supply Department (CSSD)

An establishment of hospital system which collects, stores, processes and distributes articles used in the care and treatment of the sick.

3.4 Hospital Supply System

Process of organizing stores and its function in terms of identification and specification of inventory; demand estimation; budgetary projection; procurement, inspection, storage, distribution and disposal of various inventory required in the hospital.

3.5 Inventory

Inventory refers to the stock in hand at a given point of time (a tangible asset which can be seen, weighed or counted). It refers to the stock in hand and work in progress. In most general sense, inventory is an idle resource. The financial expression is inventory in number of days.

3.6 Inventory Control

A functional activity the objective of which is to minimize the cost of procurement or maintenance of the stock in order to maintain a stipulated level of service so that the primary work of the hospital does not get disrupted.

3.7 Sterilization

Process by which all forms of live vegetation, bacteria (pathogenic and non-pathogenic), spores and viruses are destroyed.

3.8 Storage

Classification, accounting, grouping and stocking of provisions and to ensure the prevention of damage, pilferage or deterioration of its physical and chemical quality.

3.9 Stores Management

The process of carrying the right kind of materials, in right quantity, neither in excess nor in short supply, providing it quickly as an when required, keeping it safe against any kind of deterioration, pilferage or theft and to carry out the efficient performance of all these functions at the lowest possible cost.

3.10 VED Analysis

The technique used to classify items into three classes in the descending order of their criticality. V stands for 'vital' items without which the hospital cannot function and which will cause serious dislocation in the normal functioning of the hospital, such as, oxygen, anaesthetic drugs, life saving drugs, stethoscope,

suction machine etc; **E** stands for 'essential' items, the absence of which can be tolerated for a short time period, such as, IV fluids, antibiotics, O.T. trolley, patient trolley, etc; and **D** stands for 'desirable' items, the non-availability of which for a longer time period also will not affect the normal functioning of the hospital, such as, tonics, vitamins, etc.

4 GENERAL REQUIREMENTS

For functional, space, manpower, instruments and building requirements for various departments of hospital support services, reference may be made to IS 12433 (Part 1):1988.

5 HOSPITAL SUPPLY SYSTEM

5.1 Hospital supply system comprises the stores management involving stores organization. The type of inventory in a 30-bedded hospital may include the following in its domain;

- i) *Medical and Surgical Stores* — For materials of medical use including medical equipment and appliances; chemical and other pharmaceutical products, such as, medical gases, surgical sundries, etc, required for patient care services.
- ii) *General stores* — For non-medical items required for supportive services which may be sub-grouped as follows:
 - Linen,
 - Stationary, and
 - Furniture.

5.2 Location

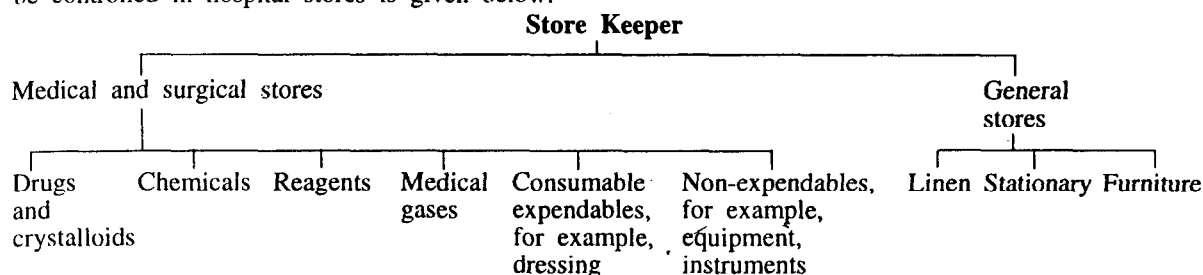
The stores should be grouped conveniently which will facilitate least travel time for distribution of supplies and easy accessibility from outside to receive supplies.

5.3 Organization Structure

5.3.1 A part time middle level manager, preferably, a doctor should be the in-charge of the stores (Storekeeper) to facilitate technical supervision, control and monitoring. Overall charge and responsibility should be with the designated Medical officer-in-charge.

NOTE — One of the medical officers in the hospital is designated as Medical officer-in-charge by rotation.

5.3.2 A structure showing the type of inventory to be controlled in hospital stores is given below:



NOTE — The organization or functioning of the medical and surgical stores is to be guided by *Drugs and Cosmetic Act* as applicable from time to time.

5.4 Functional Activities

A typical flow of activities involved in a hospital supply system is depicted in the diagram given in Annex A. The functional areas may include :

- Common receiving counter
- Issue counter
- Traction facilities (for example pushcarts)
- Storage rack (to be calculated areawise)
- Standby cold storage facilities
- Cold storage (with standby)
- Bonded drugs

The flow of functional activities may be as follows:

- a) *Enlisting of inventory* — of different types (see 5.1 and 5.3.2)
- b) *Demand Estimation* — which is based on
 - Actual consumption from the past data
 - Last one year's consumption
 - Reserves for contingency
 - Expected work load
 - Projection of new facilities/services
- c) *Procurement and placement of order* — which may be based on the specified procedure and adherence to:
 - Specifications
 - Market competition of suppliers (preferable from the manufacturers directly)

Procurement and placement of orders should be a continuous process depending on stock evaluation based on the principles of material management like ABC analysis, VED analysis and other approaches of inventory analysis.

- d) *Receiving and inspection of stores* — for determining the quantity and quality as per the laid down specifications and standards and drawing of samples for physical and chemical analysis. This may be done independent of placement of orders.
- e) *Storage and distribution* — The stores should be kept secured and should be accessible only under the supervision of the designated stores in-charge. The system of receipt and issue of the stores is to be done under the supervision of the authorized personnel.

Items requiring cold storage should be stored in refrigerator. Inflammable material should be kept away from other stores. Short shelf-life items should

be stored by first-in-first-out techniques. ABC and VED analysis of all drugs/items should be carried out to prevent stockouts of vital items/drugs and to exercise control over expensive drugs/items. Frequent review of holding of stocks to be done in user centres to prevent excess holding.

The layout of the stores should be such that there is a straight line flow of activities.

A centralized/decentralized system of distribution should be adopted depending upon the type of inventory.

- f) *Inventory control* — Physical inventory verification; review of the stock book and other records; and audit evaluation of the practice and procedures should be done periodically (at least once a year).
- g) *Security and prevention of pilferage and loss* — Adequate security means should be undertaken to avoid losses due to pilferage and theft, such as:
 - Physical control by authorized security personnel.
 - Control of visitors.
 - Timely/schedule opening and closing of stores by designated official.
 - Fire alarm system and burglar alarm system or any other technological innovation should be introduced depending on fund availability. Fire fighting equipment should be installed and the equipment should be tested at least monthly. Main switch of the store room area should be outside this area, so that electricity can be easily switched off in the event of fire.
- h) *Records* — Proper system of record keeping should be instituted for maintenance of proper inventory control. The record requirements would be determined by the issue, distribution and accounting procedure of the hospital. A standard format of indent book and updating and posting in stock ledger should be evolved. The storekeeper should maintain and update the inventory record from time to time. The other records, that is, financial, manpower/personal etc, may be maintained by the administrative assistant of the hospital.
- j) *Condemnation and Disposal of Unused Stores* — Materials which become unusable to a specific use or scrap after condemnation or due to obsolescence or damage or deterioration should be periodically (preferably six monthly) be reviewed for condemnation. Such material can be disposed of in order of preference as under:
 - Circulate within the hospitals, wards and OPD
 - Return to vendor if he is willing to accept
 - Sell to other hospitals
 - Sell to scrap dealers
 - Sell to hospital employees
 - Destroy
 - Sell it by public auction

5.5 Procedure Manual

5.5.1 General

A standard manual should be developed and followed with regard to each area of the support services including their day-to-day work. This may include staff development, operating procedures, maintenance of equipment, storage of materials, disposal of waste, and controlling mechanism.

5.5.2 Standard procedures should be laid down and followed for smooth functioning of the hospital stores. Based upon the functional activities relevant to the particular store, policy guidelines comprising the stores procedures and duties of staff may be laid down.

5.5.2.1 Training of staff

Induction training and on-the-job training of staff should be done for functional activities.

5.5.2.2 Maintenance of equipment

The store should liaise with the dealers/vendors for procurement, maintenance and repair of equipment. For guidance in hospital equipment management, reference may be made to Part 5 of this standard.

5.5.2.3 Storage

As given under functional activities [see 5.4 (e)].

5.6 Performance Evaluation

5.6.1 General

A suitable mechanism should be available with requisite infrastructural facilities for evaluating the performance of hospital support services. Performance evaluation/review should be carried out on the basis of appropriate records and statistical indices regarding performance on quality, productivity, consumption of materials, etc, on a routine basis, say every month by the department in-charge. Internal quality audit may be carried out every six months on the basis of performance records/indices and on the spot inspection/interview on sampling basis, if required to check conformance to standard procedure laid down in the standards/manuals and assess the efficacy of the system. The feedback arising out of such evaluation should be recorded and made use of in improving the quality related activities in future.

Appropriate records should consist of the data reflecting the qualitative and quantitative aspects of the various functional activities carried out. The statistical indices should be so formed that they facilitate quick assessment of the different aspects of the functional activities.

5.6.2 In hospital stores, evaluation should be carried out regularly by a committee designated by the hospital to carry out the stores audit and to periodically review quality assurance programme in stores. This review should preferably be done once in six months.

6 CENTRAL STERILE SUPPLY DEPARTMENT

6.1 Central sterile supply department (CSSD)

comprises the services within a hospital which receives, stores, processes, sterilizes, distributes, and controls professional supplies and equipment, both sterile and non-sterile, to all departments of the hospital for the care and safety of patients. CSSD is responsible for increasing the efficiency, economy and uniformity of supplies.

Major responsibilities of CSSD include processing and sterilization of needles; syringes; rubber goods (gloves, catheters, tubing); surgical instruments; treatment trays and sets; dressings, etc. Besides, it is also responsible for pooling of equipment resources of the hospital that is, economic and effective utilization under controlled supervision.

6.2 Expected Workload

The load of sterilization is expected to be 15 cubic feet/day (at the rate of 1/2 cubic feet per bed per day) approximately.

6.3 Location

The location of the department should be centralized to all the user departments but preferably near the operation theatre. Close proximity to operation theatre will help in its functioning by operating room assistants and close supervision by sister in-charge of the operation theatre and surgeon.

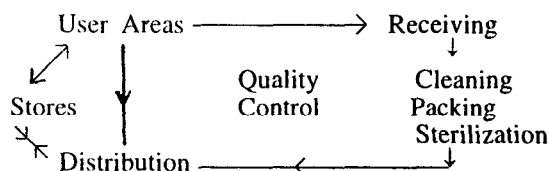
6.4 Organization Structure

CSSD should be under technical supervision of a responsible officer who is concerned with asepsis of the hospital. This officer can be either the matron or the pathologist of the hospital. Sister in-charge of O.T will assist him in his job. She will also be responsible for quality control. Operating room assistants will be responsible for handling of sterilizers and supervise helpers who will assist in receiving, cleaning, packing, loading, distribution, etc.

6.5 Functional Activities

6.5.1 CSSD may function for one shift in the routine working hours of the hospital. Some spare sterilized linen may either be kept in the operation theatre or at the despatch window in CSSD manned by a CSSD attendant/helper for use beyond the normal functioning hours.

6.5.2 Job specifications of different categories of personnel in CSSD should be laid down according to the functional requirements as shown below:



Functional flow of activities in CSSD may be generally specified as follows:

- a) *Rinsing* — Articles used should be rinsed immediately after use in the patient care area itself. However, thorough rinsing should be done at CSSD.

- b) *Cleaning* — should be done by means of brush and detergent.
- c) *Drying* — Rubber goods should be drip dried by hanging.
- d) *Packing* — Articles should preferably be packed in porous material and individual pack should not exceed 300 mm × 300 mm in size and should not weigh more than 5.5 kg. Dating of the package is essential.
- e) *Labelling* — Each pack should be marked with
 - Nomenclature of the article
 - Contents of the pack
 - Initials of the person who packed it
 - Date and initials of the person who sterilized
- f) *Sterilization* — The operation of autoclave should be entrusted to a responsible and fully trained person. It should be kept in a state of good maintenance and repair.
- g) *Storage* — should be properly managed separately for sterile and unsterile stores.
- h) *Distribution* — refers to clean and dirty articles exchange system. There should be fixed timings (morning and evening) for distribution of sterilized goods and all user areas should also deposit their unsterilized goods at CSSD at a fixed time.

6.6 Procedure Manual

Standard technical procedures for operating schedule, sterilization, packing, labelling, etc, should be followed as laid down by the Government (*see also* 5.5.1).

6.6.1 Training of Staff

Initial training in use of sterilizers may be carried out by the vendor supplying sterilizers. On the job training of helpers should be carried out in CSSD so that they become proficient in use of sterilizers independently.

6.6.2 Maintenance of Equipment

Maintenance of equipment should be the responsibility of the user. However, store assistant should extend all co-operation for repairs. For guidance on hospital equipment management, reference may be made to Part 5 of this standard.

6.6.3 Storage

For storage of unsterilized as well as sterilized goods two separate stores should be provided.

6.6.4 Record Keeping

Proper records should be maintained with respect to inventory, equipment maintenance, receipt and issue, etc.

6.7 Performance Evaluation

Quality of the sterilized goods may be assessed by the use of temperature sensitive tapes. A pathologist/microbiologist should necessarily be involved for culture of spore tubes. Other areas of interest may

be purchase, processing, sterilization, storage, distribution, usage of the materials and serviceability of items under CSSD (*see also* 5.6.1).

7 LAUNDRY

7.1 The aim of linen and laundry service is to provide clean, aseptic, free from bacterial contamination, adequate and timely supply of linen to various user areas. The scope of laundry is to wash the following types of linen:

- a) Patient care linen:
 - Bed linen
 - Body linen
 - Operation theatre linen
 - Staff linen
- b) Laundry linen:
 - Contaminated or infected linen
 - Soiled linen
 - Foul linen

7.2 Expected Workload

The expected workload is 150 kg per day, calculated on the basis that 5 kg linen is generated per bed per day on an average.

7.3 Location

Laundry should be conveniently located, preferably away from O.T. and Wards.

7.4 Organization Structure

The laundry should be under the supervision and control of the nursing superintendent (matron) who would be reporting to the designated medical officer-in-charge.

7.5 Functional Activities

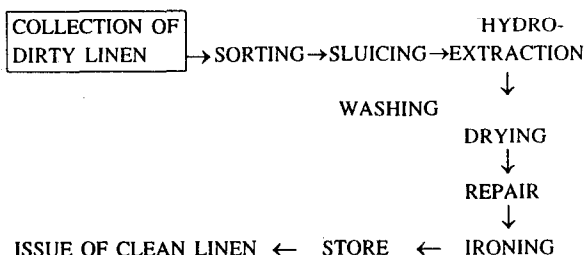
7.5.1 Various activities involved in functioning of laundry are as follows:

- a) Collection of sluiced dirty linen from individual department areas.
- b) Transportation to central dirty linen collection room.
- c) Sorting of linen into:
 - Soiled linen
 - Infected linen
 - Foul linen
- d) Removal of blood stains/sluicing.
- e) Disinfection/autoclaving.
- f) Washing/ hydroextraction.
- g) Drying in natural way/ drying tumblers.
- h) Repairs of linen (if required).
- j) Pressing/hand ironing.
- k) Distribution to individual departments where it is stored.
- m) Suitable records for receipt and distribution shall be maintained.

NOTE — Care should be taken to form a strict barrier separating the infected and non-infected linen.

7.5.2 Flow of Activity

It should be as follows:



7.6 Procedure Manual

7.6.1 General (*See* 5.5.1)

7.6.2 Training of Staff

The supply vendors should train the laundry staff at the time of installation and if required periodically.

7.6.3 Maintenance of Equipment

Preferably by rate contract through hospital stores. For guidance on hospital equipment management, reference may be made to Part 5 of this standard.

7.6.4 Storage

Clean and ironed linen should be stored in almirahs.

7.7 Performance Evaluation

Quality assurance of laundry should ensure physical, chemical and bacteriological changes in the linen washed.

Appropriate records may be maintained by nursing staff in various areas (*see also* 5.6.1).

8 HOSPITAL DIETARY SERVICE

8.1 Hospital dietary service includes planning and executing suitable appetizing, wholesome and nourishing diets. It is directly responsible for the selection and purchase of food, receipt and storage of food, its preparation and distribution.

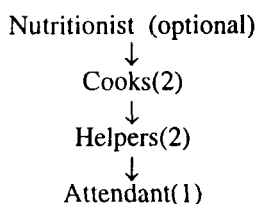
For a small hospital of this size, it may not always be feasible to provide a kitchen within the hospital, in which case, dietary service should be arranged on contract basis or the attendants of the patients may be advised as to what diet is to be given to patients which can be procured from home.

8.2 Location

If provided, the location of the kitchen should be such that:

- a) It is in the ground floor.
- b) It is centrally located and close to the wards.
- c) Convenient delivery of raw supplies to the kitchen is ensured.
- d) Premises should be large enough for orderly sequences of work without undue crossing of traffic lines.
- e) All parts of the premises used for food preparation should be adequately lit and ventilated.

8.3 Organization Structure



The Supervisor would report to the designated medical officer-in-charge who has the overall charge of the hospital.

8.4 Functional Activities

8.4.1 Kitchen should work for 14 hours in two equal shifts. The timings may differ according to the local needs.

8.4.2 The important functions of the kitchen include:

- a) Menu planning.
- b) Procurement of perishable, non-perishable articles and equipment.
- c) Receiving and storing supplies.
- d) Establishment and maintenance of safe food storage practices.
- e) Preparation of quality food and its distribution.
- f) Practice of appropriate controlling mechanism.

A typical flow diagram for functioning of a hospital kitchen is given in Annex B.

NOTE — Provision for milk formula should be made in Paediatric ward.

8.5 Procedure Manual

Based upon the functional activities, guidelines for selection, training and assignment of duties should be laid down (*see also* 5.5.1).

8.5.1 Training of Staff

The kitchen staff should be trained for diet calculation, demand calculation, placing order to the supplier, checking items received for quality and proper storage. All those engaged in handling food should be trained for personal hygiene and proper food handling while cooking and distribution. Medical checkup of the staff should be done at regular intervals and records maintained.

8.5.2 Maintenance of Equipment

Daily inspection of kitchen equipment for sanitation should be done. Maintenance of equipment shall be the responsibility of the user. All repairs and rate contract for the equipment should be done through stores.

8.5.3 Storage of Materials

Items should be optimally stored in a manner so as to prevent any deterioration of physical quality. For example perishable items such as, milk, fruit, butter, vegetables, etc, should be kept in deep freezer/cold storage and non-perishable items should be stored in a dry store/cabinet at room temperature.

8.6 Performance Evaluation

Assessment regarding the dietary services of the hospital can be made directly from the patients. The response of the patient will assess the working of the department. A committee may be constituted within the hospital to carry out internal audit and review the quality and service of meals cooked and served. Regular surprise checks by the hospital authority are important for better working of the department (*see also* 5.6.1).

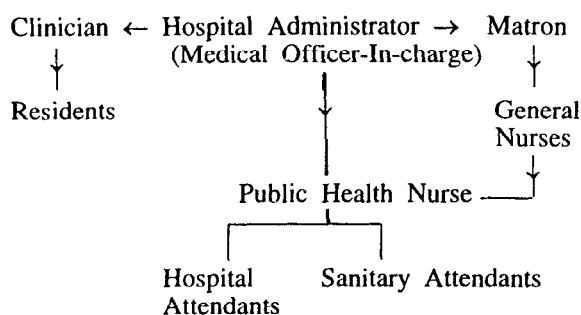
9 HOUSE-KEEPING AND MAINTENANCE

9.1 The hospital house-keeping service comprises the activities related to cleanliness, maintenance of hospital environment and good sanitation services for keeping hospital premises free from pollution.

9.2 Location

Housekeeping should be integrated with all departments of the hospital system.

9.3 Organization Structure — A recommended structure for the housekeeping activity is as follows:



9.4 Functional Activities — Various activities under housekeeping and general maintenance of the hospital include:

- Waste management
- Hospital hygiene maintenance
- Infection control
- Interior decoration contribution
- Pest control
- Odour control
- Management of housekeeping staff
- Environment cleanliness
- Sanitation
- Administrative policies related to housekeeping

9.4.1 Waste Management

On an average approximately 2 kg of solid waste is generated per bed. This will include both organic and inorganic waste material, such as, bandages, plaster casts, disposables, laboratory waste (chemical and non-chemical), kitchen waste, garbage, aborted faetus and placenta, amputated parts and other surgical waste. This is highly prone to decomposition. Besides, it is highly infected and contagious and may pose serious health hazard to the community as well as patients and employees. Therefore, it becomes

important to dispose this waste in a secured manner so as to prevent not only the health hazards, and also its recycling by the rag-pickers. The routine garbage including kitchen waste, paper, plastic disposables, etc, should be separated from the infected waste and collected and disposed separately. The best way for disposal of hospital waste is through incineration. Alternatively, the municipality trucks should be made to remove this waste in covered vehicles for safe disposal, as per their disposal system.

9.4.2 Sanitation Function

This may include dusting; cleaning; windows/walls cleaning; mopping; cleaning of furniture, fixtures, curtains, blinds, etc; sweeping; trash removal; garbage removal; bathroom maintenance; plants cleaning; elevator cleaning and environmental hygiene.

9.4.3 Maintenance Function

This may include cleaning, positioning, and maintenance of all equipments; periodic oiling and greasing of trolleys, beds, equipment/instrument trolleys, etc; maintenance of furniture and fixtures, doors, lifts and elevators, etc.

9.4.4 Safety and Security Function

This may include identifying fire risks in the hospital; making the housekeeping and other related staff aware of fire detection and fire prevention modalities; detection of fire and operation of fire alarm; ensuring

proper upkeep of fire fighting, smoke detecting and similar equipments.

9.4.5 Rodent and Pest Control

This may include identification of sources; organising, supervising and executing rodent and pest control measures.

9.4.6 Linen Management

This includes coordination with laundry services.

9.4.7 Horticulture and Landscaping

The hospital premises should look clean and inviting which can be facilitated through horticulture and landscaping services, that is, adequate plantation of trees and seasonal plants. Provision may also be kept for adequate open space and parking space.

9.5 Procedure Manual

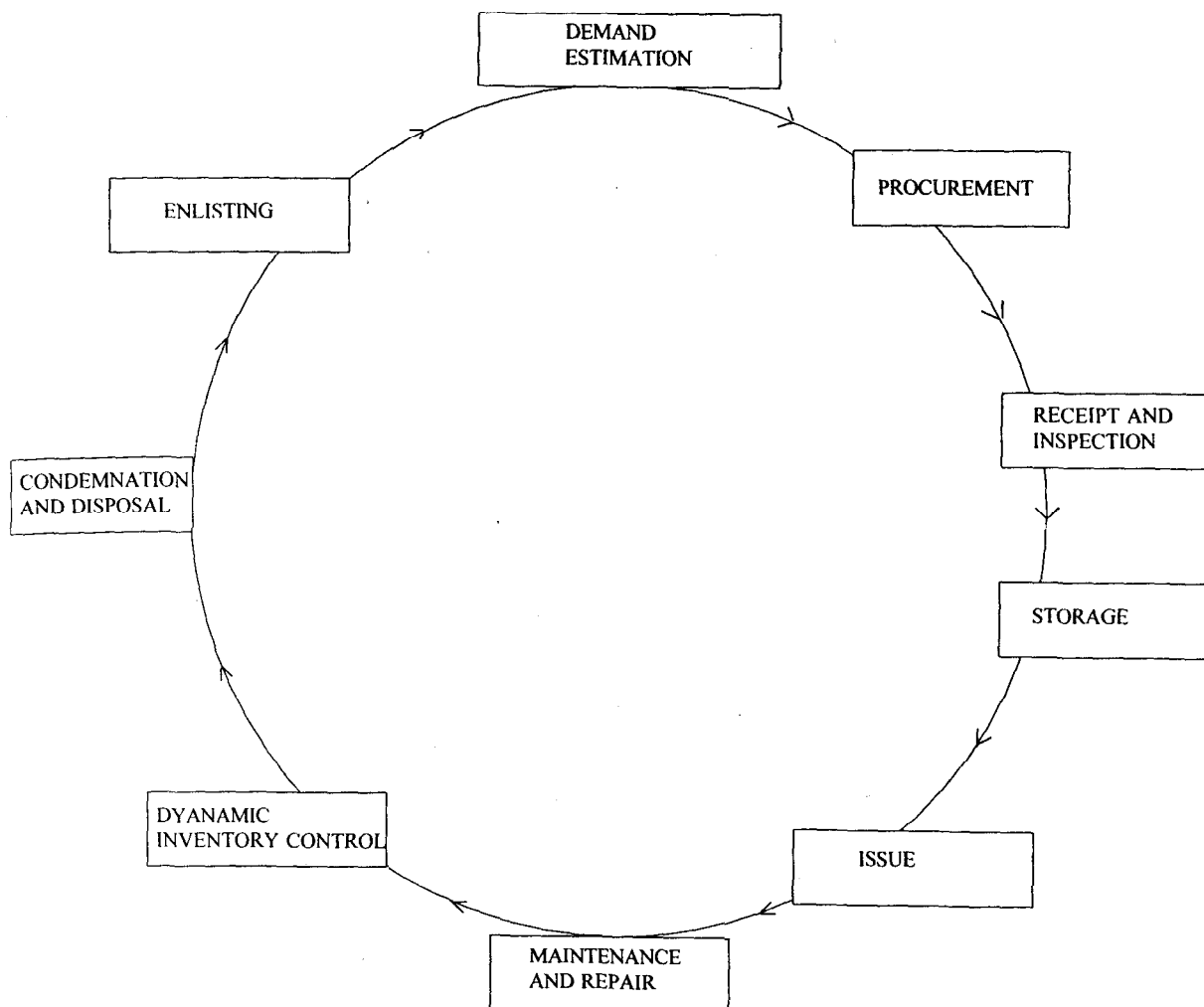
In-house 'House-Keeping Manual' should be developed in a hospital to suit its needs and preferences (*see also 5.5.1*).

9.6 Performance Evaluation

Quality assurance of housekeeping activities should ensure physical, chemical and bacteriological changes of the environment of the hospital. Appropriate records should be maintained by the housekeeping supervisory staff in various areas (*see also 5.6.1*).

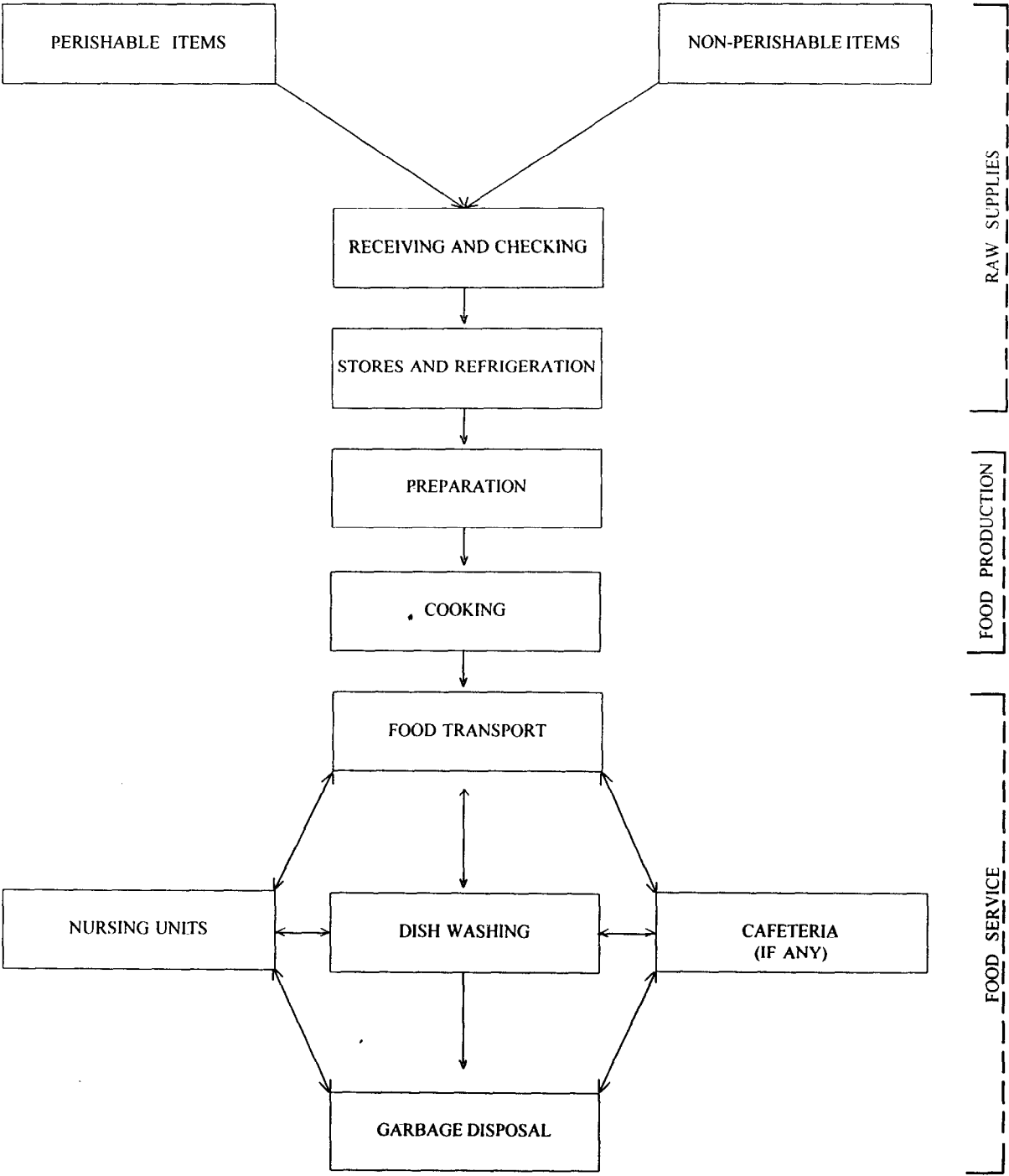
ANNEX A
(Clause 5.4)

FLOW DIAGRAM FOR MATERIALS MANAGEMENT IN HOSPITAL STORES



ANNEX B
(Clause 8.4.2)

ACTIVITY FLOW IN HOSPITAL KITCHEN



ANNEX C

(Foreword)

COMMITTEE COMPOSITION

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Department of Hospital Administration, All India Institute of Medical Sciences, New Delhi
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Deputy Director (MSD), BIS

(Continued on page 11)

(Continued from page 10)

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